DOCUMENT RESUME

ED 135 210 FL 008 346

AUTHOR Gardner, R. C.; Smythe, P. C.
TITLE Role of Attitudes in Acquiring the Language of Another Ethnic Group. Research Bulletin No. 7.
INSTITUTION University of Western Ontario, London. Dept. of Psychology.
SPONS AGENCY Department of the Secretary of State, Ottawa (Ontario).
REPORT NO Res-Bull-7e
PUB DATE Jul 76
NOTE 25p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Academic Aptitude; Anxiety; Bilingualism; English (Second Language); *Ethnic Groups; Ethnocentrism; French; *Language Attitudes; *Language Instruction; Language Proficiency; Language Skills; Parent Attitudes; Psycholinguistics; Secondary Education; Secondary School Students; *Second Language Learning; Second Languages; *Student Attitudes; *Student Motivation

ABSTRACT

After a brief review of the research concerned with the relationship between students' attitudes and second-language learning the present paper attempts to answer the question, "Do attitudes, in and of themselves, relate directly to second-language acquisition, or do they play an indirect role in providing a basis for the motivation to acquire a second language?" Data were collected from three different samples of 11th grade students. The first group is composed of Anglophone students studying French in a relatively monolingual setting, while the second group represents Anglophone students in a bilingual (English/French) setting, and the third group, Francophone students studying English in a bilingual (French/English) milieu. Measures of a number of attitudes, motivation, classroom anxiety, and language aptitude (I.Q. in the case of the Francophone sample) were subjected to a series of correlational analyses which also included five variables representing possible linguistic and non-linguistic outcomes of second language programs. Both first order and semi-partial correlations were used to demonstrate that the major role of attitudes in the process of second language acquisition appears to be one of providing support for the motivation required to sustain the student in formal second language programs. (Author)

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ED135210

THE ROLE OF ATTITUDES IN ACQUIRING THE LANGUAGE OF ANOTHER ETHNIC GROUP[1]

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RESEARCH BULLETIN NO. 7
JULY, 1976

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FL008346

[1]This research was supported by a grant to the authors from the Language Programmes Branch of the Office of the Secretary of State.

C.P.A. Toronto, June 11, 1976

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ABSTRACT

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Data were collected from three different samples of 11th grade students. The first group is composed of Anglophone students studying French in a relatively monolingual setting while the second group represents Anglophone students in a bilingual (English/French) setting, and the third group, Francophone students studying English in a bilingual (French/English) milieu.

Measures of a number of attitudes, motivation, classroom anxiety, and language aptitude (I.Q. in the case of the Francophone sample) were subjected to a series of correlational analyses which also included five variables representing possible linguistic and non-linguistic outcomes of second language programmes. Both first order and semi-partial correlations were used to demonstrate that the major role of attitudes in the process of second language acquisition appears to be one of providing support for the motivation required to sustain the student in formal second language programmes.

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The Role of Attitudes in Acquiring the Language of Another Ethnic Group[1]

R. C. Gardner and P. C. Smythe
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Considerable research has been conducted on the relation of attitudes to second language acquisition. One of the earliest studies conducted was by Jones (1950) who found significant correlations between attitudes toward Welsh and achievement in Welsh. Since that time many studies have demonstrated relationships between a host of attitude measures and achievement in a number of different languages in a variety of different geographical regions. These studies have investigated anglophones learning French in Montreal (Gardner and Lambert, 1959); London, Ontario (Smythe, Stennett and Feenstra, 1972); and Saskatchewan (Rhandawa and Korpan, 1973); United States (Gardner and Lambert, 1972); Jewish children learning Hebrew in Montreal (Anisfeld and Lambert, 1961); Filipino students learning English in Manila (Gardner and Santos, 1970); Indian students learning English in India (Lukmani, 1972), and Chinese students learning English in the American Southwest (Oller, Hudson and Liu, 1976). These studies made use of differing tests of attitudes, and examined different criteria of achievement in the second language. They all, nonetheless, were in agreement in demonstrating a relationship between attitudes and achievement in the second language, even (in those studies which included appropriate measures) when the effects of intelligence or language aptitude were isolated through statistical means. Such findings take on added

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significance when it is realized that there is some controversy in the area of social psychology concerning the relationship of attitudes to behaviour (see, for example, Wicker, 1969).

In 1975, Gardner and Smythe (1975) reported the results of a three year project they had conducted in which they developed and validated a series of measures of attitudes and motivation concerned with second language acquisition appropriate to students as young as 12 years of age. This report demonstrated that the various measures had a high degree of internal consistency and test-retest reliability and that they related in meaningful ways to a number of criteria including not only various traditional measures of second language achievement, but also the tendency to persist in or drop out of second language study.

Based in part on a set of 10 factor analyses conducted on samples of anglophone students studying French in grades 7 to 11, and on the previous research conducted, Gardner and Smythe (1975) argued that the successful acquisition of a second language was mediated by an integrative motive (cf., Gardner, 1966). This motivational complex was hypothesized to reflect an interest or desire to learn the language of a valued second language community in order to promote interaction with members of that group. The motivational component, moreover, reflected a number of attitudinal correlates. That is, integratively motivated students, in addition to evidencing favourable attitudes toward the other language group, the learning of the language, and expressing an interest in learning the language in order to interact with members of that community, also express favourable attitudes toward the learning situation (ie., the course and the teacher), toward learning any foreign language, and report

considerable encouragement from their parents to develop proficiency in the second language. Such a pattern of results indicates that the motivation to learn a second language has a considerable attitudinal foundation.

For the past three years, we have been concerned with studying the implications of this association between motivation, attitudes and second language achievement in seven different regions in Canada where anglophones are studying French as a second language, as well as in two regions where francophones are studying English as a second language. With respect to the anglophone studies, regions were selected so that some could be classified as relatively bilingual, and some as relatively English monolingual areas. In addition, we have focused on two different types of goals of formal language programs, that is, the linguistic and non-linguistic objectives. Both types of goals are commonly referred to in the curriculum guidelines of the various Ministries of Education for their second language courses. The linguistic objectives refer to actual skill development in the second language. Although different programs may focus on different types of skills such as knowledge of structure, reading skills, oral proficiency, aural comprehension and the like, they do agree that an objective of second language training is the obvious one of developing some level of proficiency in the language. Most research on the role of attitudinal/motivational variables in second language acquisition have focused on these types of objectives, using as criteria various indices of second language proficiency. Non-linguistic objectives, on the other hand, refer to a host of less tangible goals such as improving attitudes toward the other language community, reducing prejudice,

developing an interest in learning the language, and promoting contact between the two communities. Though it is not obvious how second language programs are supposed to attain these latter objectives, it is interesting that such aims are often given priority in curriculum guidelines. Nonetheless, since they often are given as objectives of second language programs, they too can be considered as criteria in studies of the role of attitudinal/motivational variables in second language acquisition. As stated above, however, such criteria have received little investigation, though some studies (Bartley, 1969; 1970; Gardner and Smythe, 1975) have studied the relation of attitudes to the criterion of persisting in language study which could be considered a non-linguistic goal. More recently, Gardner, Smythe, Clément and Gliksman (1976) have summarized some of the literature concerning attitudes, motivation and their relation to both linguistic and non-linguistic outcomes and, in addition, presented data relating student attitudes and motivation to; Second Language Proficiency, the Foreign Language Drop-out Phenomenon, Student Behaviour in the Second Language Classroom, and the Effects of Excursion and Exchange Programmes on Students' Attitudes.

It is obvious that formal second language training is not the only avenue to achieving these various linguistic and non-linguistic goals. Indeed, some of these goals may be achieved more efficiently in informal learning contexts. A fair amount of literature has addressed itself to the distinction between formal and informal contexts of second language acquisition. For example, Macnamara (1973; 1975) reviews the arguments that formal (i.e., classroom) training may produce "artificial" second language competencies. In our research, we have not subscribed to this

"either-or" argument but have rather viewed the two learning contexts as potentially complimentary. While the major thrust of our research programme has been involved with the processes and outcomes of formal language training we have also attempted where possible to gain information concerning students' informal experiences (i.e., second language use outside the classroom, and the effects of excursion and exchange programmes).

The purpose of this paper is to focus directly on the role of attitudes in second language acquisition. Specifically the question posed is, "Do attitudes in and of themselves relate directly to second language acquisition, or do they play an indirect role in providing a basis for the motivation to acquire a second language?" The answer to such a question seems best obtained by investigating:

(a) The correlation between various attitude measures and the index of motivation.

(b) The correlation between various attitude measures and the different criteria.

(c) The semi-partial correlation between various attitude measures (with the effects of motivation removed) and the different criteria.

(d) The semi-partial correlation between motivation (with the effects of each attitude removed) and the different criteria.

In the research on second language acquisition, two additional variables, French Classroom Anxiety and Language Aptitude have been found to be related to measures of achievement (Gardner and Smythe, 1975). In the data to be presented here, the relationships of these two variables with the various criteria are presented for comparison purposes. These

data consist of a summary of the first order correlations, and the semi-partial correlations for seven attitude measures, as well as the measures of French classroom anxiety and language aptitude with five criterion measures. They are based on a sample of 204 grade 11 students studying French as a second language in a relatively monolingual, anglophone milieu. The ten predictor variables investigated are:

1. Interest in Foreign Languages. This is an index of the student's degree of interest in learning foreign languages. The items comprising this scale refer to foreign languages in general and not any particular second language. As such it appears to reflect a general interest in acquiring second languages.
2. Integrativeness. This is a composite measure involving attitudes toward the specific second language community (in our case French Canadians, and the European French), and a scale assessing the extent to which individuals feel that learning French as a second language is important in order to meet with and become more knowledgeable about the French speaking community.
3. Evaluation of the Learning Situation. This is a composite of two measures assessing attitudes towards the French course and the French teacher.
4. Instrumentality. This is an index of the extent to which students feel that the learning of a second language is important for pragmatic or utilitarian reasons such as to obtain a good job, to achieve future success or to be a better educated person. No reference is made to a desire to communicate with members of the other language community.

5. Parental Encouragement. This is an assessment of the extent to which the student feels that he receives active encouragement from his parents to acquire the second language.
6. Need Achievement. This is a general measure of the desire to do well in any task the individual undertakes.
7. Ethnocentrism. This measure was adapted from Adorno, Frenkel-Brunswick, Levinson and Sanford (1950) and is an index of the extent to which an individual perceives his own group as superior and outgroups as inferior.
8. French Class Anxiety. This is a scale measuring the extent to which the student reports that he feels intimidated or anxious when speaking French in the classroom.
9. Language Aptitude. This measure consists of the short form of the Modern Language Aptitude Test (Carroll and Sapon, 1959).
10. Motivation. This is a composite measure involving three scales, Motivational Intensity (an index of the amount of effort expended to learn French), Desire to Learn French (an assessment of how much the student wants to learn French) and Attitudes toward Learning French.

The relationships of these variables to five criteria were investigated. The criteria are:

Behavioural Intention: Ss were asked if they intended to reenroll in French the next year. Their answers were coded 1 for "no", 2 for "I don't know", and 3 for "yes".

Opportunities to Use French Outside of School During the Preceding Year: An affirmative answer was coded 2 and a negative, 1.

Self-Ratings: Ss were asked to rate their own French skills on four 7-point scales (i.e., writing, understanding, reading and speaking). A composite self-rating score was formed by summing Ss' responses to these four items.

Grades in French: Classroom teachers supplied the final course grade for each S in the study. Before any further analyses these grades were converted to standard scores within each classroom grouping.

French Speech: Ss were asked to describe a series of four cartoon panels after studying them for a two minute period. Responses were tape recorded and then rated by two judges for both fluency and pronunciation accuracy. A second task required Ss to study a short passage of French prose and then read it aloud. These passages were also recorded and scored for fluency and accuracy. The French Speech score represents the sum of these four ratings.

These five criteria represent a reasonable cross-section of non-linguistic and linguistic goals. Behavioural Intention to Continue French Study and Opportunities to Use French are representative of non-linguistic goals since they reflect,respectively,an interest in improving second language competence through further study, and an attempt to communicate with members of the other community. Although they are both based on self-reports, the validity of the Behavioural Intention measure, at least, has been verified. With other samples, Gardner and Smythe (1975) obtained 95% agreement between the Behavioural Intention measure and actual reenrollment in French the following year. The measure of Self-Ratings

of proficiency probably reflect both linguistic and non-linguistic objectives since it involves both some degree of objectively defined second language proficiency as well as the student's self confidence with whatever second language skills he has developed. The two indices, Grades in French and French Speech are viewed traditionally as reflecting the linguistic objectives of second language courses.

Table 1 presents a summary of the major relationships. The first

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Insert Table 1 About Here

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column of Table 1 presents the correlations of each of the attitude measures with the index of motivation. It will be noted that all of the correlations are significant at the .01 level, but that those involving Interest in Learning Foreign Languages, Integrativeness, and Attitudes toward the Learning Situation are appreciably higher than the others. When attention is directed to the correlations of each of the attitude measures with Behavioural Intention to Continue French (column 2), it will be noted that all but two of the correlations (those involving Need Achievement and Ethnocentrism) are significant, and that the correlation involving the index of motivation is substantially greater than the rest. Such results might be taken as evidence that although the attitudes (and incidentally the French Classroom Anxiety and Language Aptitude indices) are significant correlates of Behavioural Intention to Continue French, the measure of motivation is the most potent predictor. The relative importance of each of the attitude variables in contrast with the index of motivation to prediction of Behavioural Intention to Continue French

is demonstrated in the next two columns. Column 3 presents the semi-partial correlations of each of the attitude measures with Behavioural Intention to Continue French, with the effects of motivation removed from the attitude measures. None of the correlations are significant indicating that the attitudes in and of themselves are not effective in influencing the decision to continue French study. In contrast, Column 4 presents the semi-partial correlation of Motivation with Behavioural Intention to Continue French removing the effects from Motivation of the Attitude measure. Each of the correlations are significant and appreciable. Considering both sets of semi-partial correlations, the conclusion appears warranted that motivation is the prime determinant of the decision to continue French study, and that the various attitudes play their major role as supports to the motivation. Although the attitude variables are related to Behavioural Intention to Continue French, this relationship is due almost completely to their determining influence on motivation.

The same general pattern is obtained with the remaining four criteria, Opportunities to Use French Outside of Class, Self-Ratings of French Skills, Grades in French, and French Speech Fluency and Accuracy. Considering all five criteria it will be noted that Motivation is the highest correlate for all but the Self-Ratings of French Skills. In this case, French Classroom Anxiety is understandably the highest correlate. Furthermore, aptitude is an appreciable correlate only for the two clearly linguistic outcomes (Grades and French Speech). For each criterion, however, the generalization appears warranted that any association between attitudes and achievement is due to their link with motivation. This suggests that attitudes play their major role in the acquisition of a second language by acting as motivational supports.

Table 2 summarizes the same information for a sample of 180 grade 11

Insert Table 2 About Here

anglophone students learning French in a bilingual context. Careful inspection of the table will reveal some differences in the results from those presented earlier, but in general the same findings emerge. In this bilingual setting, Interest in Foreign Languages is not so highly related to Motivation. The three major correlates of Motivation are Integrativeness, Attitudes toward the Learning Situation and Parental Encouragement. It seems reasonable in a bilingual setting that students' motivation may be more highly related to parental encouragement because some parents may be appreciably more vocal in their support or lack of support for second language acquisition. The results are consistent with those for the monolingual setting, however, in that they demonstrate by and large that any correlation of the attitudes with the criteria are primarily dependent upon the motivational component. When individual differences in motivation are removed from the attitude variables, the resulting correlations are generally not significant. When, on the other hand, individual differences in attitudes are removed from motivation a significant correlation is maintained.

When attention is directed toward the highest correlates of each of the criteria, a somewhat different pattern emerges in a bilingual milieu. For the monolingual cultural setting, it was noted that motivation was the single best correlate of all criteria except Self-ratings of proficiency where French classroom anxiety was best. In this bilingual region,

although motivation is still a significant correlate, French classroom anxiety is a higher correlate for Opportunities to Use the Language Self-Ratings of Proficiency and French Speech Fluency and Accuracy. Since this is a bilingual community, it seems obvious that students will have greater opportunities to speak French and to experience the anxiety accompanied by attempting to communicate in the second language. It thus follows that anxiety may be more salient in such a situation.

Table 3 presents the same material for a sample of 151 grade 11

Insert Table 3 About Here

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francophone students studying English in a bilingual setting (Clément, Gardner and Smythe, 1976). In this case, however, the two linguistic criteria differ from those assessed in the anglophone studies. The measure, Written English is the student's final marks in written English achievement, while the measure of Oral/Aural English is the student's final grade in these communicative skills. Also, a measure of Intelligence was substituted for the measure of Language Aptitude. Again, the results display some differences from the other two samples, but the same general pattern emerges. That is, the attitude measures are generally significantly correlated with motivation, and motivation correlates significantly with the various criteria (with the exception of the measure of Written English). And as before, although the semi-partial correlations of motivation with the criteria are significant, those for attitudes are not. In this situation, furthermore, motivation is most highly correlated with the attitude measures, Interest in Foreign Languages, Integrativeness, Attitudes toward the Learning Situation, and Parental Encouragement.

Of the differences which are evident, it will be noted that motivation is not highly related to the two linguistic criteria, whereas it is the single best predictor of the other three criteria. In the case of Written English, both Intelligence and French Classroom anxiety are much better predictors, while for the oral/aural skills Intelligence is the single best predictor. This pattern differs from that obtained for the two anglophone samples, except that the finding of the lowered predictive value of motivation for linguistic criteria is consistent with that obtained for the anglophone sample from the bilingual milieu. It seems possible, therefore, that the role of motivation in determining linguistic achievement of relatively advanced students in bilingual areas is attenuated. Reasons for such attenuation require further research, but it should be emphasized that the motivational variable is consistently important for the other criteria studied.

These three sets of results, therefore, warrant the conclusion that in both bilingual and monolingual milieu, the major role that attitudes play in the acquisition of a second language is to provide support for motivation. Motivation would appear to be the major causative variable in determining individual differences in both linguistic and non-linguistic criteria, but attitudes serve to influence appreciably the students' motivational level. The concept of the Integrative Motive is thus supported by these findings, and the general role it plays is clarified. Achievement in a second language is mediated to a considerable extent by motivational variables, but attitudes associated with the second language serve to support a student's motivation in the lengthy task of acquiring the second language.

References

Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., and Sanford, R. N. The Authoritarian Personality, New York: Harper, 1950.

Anisfeld, M., and Lambert, W. E. Social and psychological variables in learning Hebrew. Journal of Abnormal and Social Psychology, 1961, 63, 524-529.

Bartley, D. E. A pilot study of aptitude and attitude factors in language dropout. California Journal of Educational Research, 1969, 20, 48-55.

Bartley, D. E. The importance of the attitude factor in language dropout: A preliminary investigation of group and sex differences. Foreign Language Annals, 1970, 3, 383-393.

Carroll, J. B., and Sapon, S. M. Modern Language Aptitude Test, Form A. New York: The Psychological Corporation, 1959.

Clément, R., Gardner, R. C., & Smythe, P. C. Inter-ethnic contact: Attitudinal consequences. Research Bulletin No. 336, Department of Psychology, University of Western Ontario, 1975.

Gardner, R. C., and Lambert, W. E. Motivational variables in second-language acquisition. Canadian Journal of Psychology, 1959, 13, 266-272.

Gardner, R. C. Motivational variables in second-language learning. International Journal of American Linguistics, 1966, 32, 24-44.

Gardner, R. C., and Lambert. W. E. Attitudes and Motivation in Second-Language Learning. Rowley: Newbury House, 1972.

Gardner, R. C., and Santos, E. H. Motivational variables in second-language acquisition: A Philippine investigation. Research Bulletin No. 149, Department of Psychology, University of Western Ontario, 1970.

Gardner, R. C., and Smythe, P. C. Second language acquisition: A social psychological approach. Research Bulletin No. 332, University of Western Ontario, 1975.

Gardner, R. C., Smythe, P. C., Clément, R., and Gliksman, L. Second-language learning: A social psychological perspective. Canadian Modern Language Review, 1976, 32, 198-213.

Jones, W. R. Attitude towards Welsh as a second language, a further investigation. British Journal of Educational Psychology, 1950, 20, 117-132.

Lukmani, Y. M. Motivation to learn and language proficiency. Language Learning, 1972, 22, 261-273.

Macnamara, J. Nurseries, streets and classrooms: Some comparisons and deductions. Modern Language Journal, 1973a, 57, 250-254.

Macnamara, J. Comparison between first and second language learning. Working Papers in Bilingualism, 1975, 7, 71-94.

Oller, J., Hudson, A., and Liu, P. Attitudes and attained proficiency in ESL: A sociolinguistic study of native speakers of Chinese in the United States, 1976. University of New Mexico (mimeo).

Randhawa, B. S., and Korpan, S. M. Assessment of some significant affective variables and the prediction of achievement in French. Canadian Journal of Behavioral Science, 1973, 5, 24-33.

Smythe, P. C., Stennett, R. C., and Feenstra, H. J. Attitude, aptitude and type of instructional program in second language acquisition. Canadian Journal of Behavioral Science, 1972, 4, 307-321.

Wicker, A. W. Attitudes versus actions: The relationship of verbal and overt behavioural responses to attitude objects. Journal of Social Issues, 1969, 4, 41-78.

	Mot.	Behav. Inten.			Opp. to Use			Self-Rat.			Grade			Speech		
	r_1	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4
Int. in For. Lang.	.74**	.33**	-.08	.41**	.27**	.01	.24**	.24**	-.02	.24**	.37**	.00	.34**	.44**	.07	.30**
Integ.	.68**	.36**	.12	.39**	.21**	.04	.29**	.26**	.11	.24**	.31**	.07	.40**	.40**	.16	.38**
Att. Lrg. Sit.	.62**	.34**	.02	.39**	.19**	-.04	.31**	.17*	-.05	.30**	.27**	-.05	.42**	.39**	.08	.37**
Instr.	.34**	.23**	.06	.47**	.05	-.08	.36**	.17*	.06	.30**	.15*	-.02	.48**	.19	.01	.49**
Par. Enc.	.21**	.21**	.10	.49**	.04	-.04	.36**	.09	.02	.33**	.04	-.07	.50**	.15	.04	.51**
Need Ach.	.33**	.08	-.10	.52**	.09	-.03	.35**	.15*	.04	.31**	.34**	.19**	.41**	.42**	.26**	.42**
Ethno.	-.31**	-.06	.11	.53**	-.06	.05	.36**	-.14*	-.04	.31**	-.37**	-.23**	.41**	-.42**	-.26**	.42**
Fr. Cl. Anx.	-.33**	-.28**	-.11	.45**	-.25**	-.14*	.29**	-.50**	-.41**	.19**	-.27**	-.11	.44**	-.48**	-.32**	.39**
Lang. Apt.	.18**	.19**	.10	.49**	.05	-.02	.36**	.16*	.10	.32**	.48**	.40**	.42**	.49**	.40**	.45**
Mot.		.52**			.36**			.34**			.50**			.53**		

* $p < .05$

** $p < .01$

r_1 -- Correlation of Attitudes with Motivation

r_2 -- Correlation of Attitudes with Criterion

r_3 -- Semi-partial Correlation of Attitudes (Motivation Removed) with Criterion

r_4 -- Semi-partial Correlation of Motivation (Attitude Removed) with Criterion

TABLE 1

CORRELATIONS AND SEMI-PARTIAL CORRELATIONS OF TEN VARIABLES WITH FIVE CRITERIA - GRADE 11, ANGLOPHONES STUDYING FRENCH - MONOLINGUAL MILIEU

	Mot.	Behav. Inten.			Opp. to Use			Self-Rat.			Grade			Speech		
	r_1	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4
Int. in For. Lang.	.29**	.40**	-.02	.36**	.27**	.04	.18*	.37**	.10	.18*	.15*	-.06	.21**	.14	-.08	.22**
Integ.	.62**	.23**	-.13	.51**	.19**	-.01	.26**	.41**	.21**	.19*	.12	-.04	.22**	.02	-.17**	.30**
Att. Lrg. Sit.	.48**	.26**	.00	.47**	.05	-.12	.34**	.14	-.06	.38**	.07	-.06	.25**	-.04	-.18**	.31**
Instr.	.29**	.12	-.04	.53**	.02	-.01	.26**	.14	.03	.38**	.20**	.13	.20**	.20	.13	.20**
Par. Enc.	.51**	.32**	.05	.44**	.33**	.19**	.18**	.25**	.05	.32**	.10	-.03	.23**	.10	-.03	.23**
Need Ach.	.26**	-.06	-.21**	.54**	-.01	-.10	.33**	.02	-.09	.41**	.03	-.04	.25**	-.07	-.14	.28**
Ethno.	-.02	-.12	-.11	.36**	-.06	-.05	.32**	-.01	.00	.40**	-.12	-.12	.25**	-.08	-.08	.25**
Fr. Cl. Anx.	-.18*	-.19**	-.09	.51**	-.35**	-.30**	.26**	-.47**	-.40**	.32**	-.24**	-.20**	.21**	-.64**	-.60**	.10
Lang. Apt.	.05	.07	.04	.54**	-.10	-.12	.33**	-.11	-.13	.41**	.27**	.26**	.24**	-.04	-.05	.25**
Mot.		.54**			.32**			.40**			.25**			.25*		

r_1 -- Correlation of Attitudes with Motivation

r_2 -- Correlation of Attitudes with Criterion

r_3 -- Semi-partial Correlation of Attitudes (Motivation Removed) with Criterion

r_4 -- Semi-partial Correlation of Motivation (Attitude Removed) with Criterion

* $p < .05$

** $p < .01$

TABLE 2

CORRELATIONS AND SEMI-PARTIAL CORRELATIONS OF TEN VARIABLES WITH FIVE CRITERIA - GRADE 11, ANGLOPHONES STUDYING FRENCH - BILINGUAL MILIEU

	Mot.	Behav. Inten.			Opp. to Use			Self-Rat.			Written Eng.			Oral/Aural Eng.		
	r_1	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4	r_2	r_3	r_4
Int. in For. Lang.	.58**	.33**	.06	.37**	.10	-.12	.35**	.40**	.09	.40**	-.01	-.11	.18*	.08	-.03	.16*
Integ.	.65**	.29**	-.04	.40**	.15	-.09	.32**	.40**	.05	.39**	-.05	-.19*	.23**	.00	-.15	.24**
Att. Lrg. Sit.	.41**	.13	-.08	.48**	.17*	.03	.30**	.13	-.11	.56**	-.05	-.12	.18*	-.04	-.12	.22**
Instr.	.35**	.29**	.13	.41**	.01	-.12	.36**	.22**	.03	.52**	.01	-.04	.15	.05	-.01	.17**
Par. Enc.	.44**	.34**	.14	.38**	.09	-.07	.33**	.18*	-.07	.54**	-.07	-.15	.19*	-.01	-.10	.21*
Need Ach.	.24**	-.01	-.13	.51**	.14	.06	.32**	.17*	.04	.53**	-.01	-.04	.15	-.01	-.05	.19*
Ethno.	.15	.12	.05	.48**	.09	.04	.33**	.13	.05	.55**	-.04	-.06	.15	-.16*	-.19*	.21*
Fr. Cl. Anx.	-.32**	-.01	.15	.51**	-.28**	-.18*	.26**	-.48**	-.32**	.43**	-.41**	-.39**	.01	-.28**	-.23**	.10
I.Q.	-.05	-.19*	-.17*	.48**	.05	.07	.34**	.13	.16*	.57**	.40**	.41**	.16*	.51**	.52**	.21**
Mot.		.49**			.34**			.56**			.14			.18*		

r_1 -- Correlation of Attitudes with Motivation

r_2 -- Correlation of Attitudes with Criterion

r_3 -- Semi-partial Correlation of Attitudes (Motivation Removed) with Criterion

r_4 -- Semi-partial Correlation of Motivation (Attitude Removed) with Criterion

* $p < .05$

** $p < .01$

TABLE 3

CORRELATIONS AND SEMI-PARTIAL CORRELATIONS OF TEN VARIABLES WITH FIVE CRITERIA - GRADE 11, FRANCOPHONES STUDYING ENGLISH, BILINGUAL MILIEU